CLAIMS

What is claimed is:

1. A method for forming a hydrogel string comprising the steps:

providing a delivery device having a gelation chamber;

providing a prepolymer composition that will form a hydrogel when brought into contact with a gelation initiator;

contacting the prepolymer with the gelation initiator in the gelation chamber so that it form a hydrogel in the gelation chamber; and

extruding the hydrogel from the delivery device as a hydrogel string.

- 2. The method of claim 1, wherein the delivery device is a catheter.
- 3. The method of claim 2, wherein the delivery device is a multilumen catheter.
- 4. The method of claim 1, wherein the delivery device is a catheter having at least two lumens and a gelation chamber at the distal end.
- 5. The method of claim 4, wherein the catheter is a coaxial catheter having an inner catheter and an outer catheter and the method further comprises the step of step of sliding the inner catheter within the outer catheter to increase or decrease the length of the gelation chamber.
- 6. The method of claim 1, wherein the prepolymer composition comprises at least two solutions that will form a hydrogel when combined in the gelation chamber.
- 7. The method of claim 1, wherein the hydrogel is extruded as prepolymer composition is moved into the gelation chamber.
- 8. The method of claim 1, wherein the delivery device is a coaxial dual lumen catheter and the inner catheter is slidable within the outer catheter so that the degree of formation of the hydrogel string as it exits the gelation chamber can be altered as the inner catheter is slid towards the distal end of the gelation chamber.
- 9. A hydrogel string formed by the method of claim 1.
- 10. A hydrogel string formed by the method of claim 5.
- 11. A hydrogel string formed by the method of claim 6.
- 12. A hydrogel string formed by the method of claim 8.